

An Analysis of the Photography of Beijing's Architectural Images

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Abstract: This paper takes image records as clues, integrates image data and case analysis to sort out the history of Beijing architectural photography, analyzes the characteristics and photographic performance of Beijing architecture, discusses the innovation of Beijing architectural photography in the era of media integration, and combines its own series of practical shooting to visualize and visualize the pulsation of Beijing urban architectural photography. Finally, this paper discusses the AI-enabled Beijing urban image creativity, and the subject-object blending and role exchange of architectural image creation in the era of media integration, providing a new perspective and method for urban architectural photography.

Keywords: Beijing; Architecture; Photography; Image

1. Introduction

Beijing is the earliest city of photography development in China. When the Anglo-French Allied Forces occupied Beijing in 1860, Italian photographer Felice Beato left behind the first photographs of many buildings, such as the Daqing Gate and Tiananmen [1]. In 1900, the French Far East Division used hydrogen balloons to complete panoramic shooting of Beihai, Jingshan, Forbidden City and other areas, becoming the earliest aerial image data in China [2]. At the beginning of the 20th century, photographers from many countries, including Japanese photographers Yamamoto Zanchiro and Ogawa Ishin, came to Beijing to take pictures of a large number of street scenes, buildings and people's daily life, which provided valuable information for the study of Beijing in the late Qing Dynasty and the early Republic of China [3]. During the period of the Republic of China, photojournalist Sidney D. Gamble took a large number of photos reflecting the famous buildings in the central axis of Beijing, including the familiar South-Facing Gate, Tiananmen and the Imperial Palace. In these image materials, most of them are stored in the world as precious materials such as *Beijing Central Axis Centennial Image*. With the process of modern times, a large number of old Beijing scenes such as city walls, city gates, hutongs and bazaars were photographed, some of which were preserved in publications such as *Door of the Axis*. After the founding of New China, Dehong Zheng, Zhaozong Chen and other photographers took a large number of photos of Beijing's urban construction, recording architectural images and urban expansion scenes from the 1950s to the 1960s, such as the Great Hall of the People, Beijing Station and other top ten buildings. The completion process has a more detailed record. After the reform and opening up, Jinbiao Liu, a full-time photographer of the Beijing Institute of Architectural Design and Research, began to retake buildings such as Beijing Tiananmen Square and Beijing Hotel from the perspective of old photos of Beijing left by predecessors in the 1990s, forming a contrast between 50 years ago and now[4]. Since the beginning of the 21st century, Beijing Institute of Surveying and Mapping has used satellite images to present the changes of key areas such as the city's sub-center and the Grand Canal in the past 10 years. Through architectural images, we can not only observe the changes of social appearance and historical culture, but also reflect the pulsation of economic and cultural thoughts in the process of urban development in Beijing under the background of globalization and rapid urbanization.

2. Historical stages and characteristics of Beijing city image

2.1 The initial record from the perspective of colonization

Beijing's urban image records began in the era of foreign invasion after the middle of the 19th century. When the British and French allied forces occupied Beijing (the Second Opium War), Italian war

photographer Felice Beato took images including Forbidden City, Daqingmen, Tiananmen, and Jingshan as a reporter in the army. This is the earliest photographic image record of Beijing. After entering 1900, the French camera crew used hydrogen balloons to take panoramic photos of Beihai, Jingshan, Forbidden City and other landscapes, which were the earliest aerial photos of Beijing and even China. At this time, photography is in the period of wet photography (Collodion Process), and it needs to be coated with photosensitive materials on the spot for immediate exposure imaging. Therefore, the exposure time of each photo should reach a few seconds or even a few minutes, leaving only a few scattered images of the building at that time without being able to measure the light. However, these works have caused a huge sensation in Europe, prompting people to have more reverie about the Mysterious East. The French military conducted aerial photography in Beijing, capturing the Qing army's defensive arrangements, which became part of the *La Chine A Terre et en Ballon* series. This collection depicts the French military's narrative of conquering Beijing. These photos reflect the gaze of the other from the perspective of the West (Fig.1) [5]. They regard the Forbidden City as a symbol of the imperial power of the East rather than the actual space in life. The purpose of shooting is not to retain and understand the cultural motivation of this space itself, but to use this photo to carry out the so-called geographic mapping and occupation propaganda of Beijing by the West. But if you put aside the subjective will, these old photos provide people with an understanding of the city of Beijing at that time.



Fig.1 Wumen, 1860, Bituo, photographed on the south side of the Quezuo Gate

2.2 Systematic filing in the period of the Republic of China

During the period of the Republic of China, there were systematic records of Beijing's urban architectural images. American sociologist Sidney David Gamble took photos of the axis buildings of South-Facing Gate, Tiananmen and the Imperial Palace from 1917 to 1919, and then compiled and published *the Beijing Central Axis Centennial Image* (Fig.2) [6]. Different from the novelty-seeking perspective of the colonial period, Beijing's urban image moved towards archives. The photos of South-Facing Gate taken by Gambo in the 1910s clearly show the process of demolishing the Wengcheng and widening the road. Although the perspective is still Western, it represents the germination of the perspective of local folk artists. Gambo's image is more inclined to record the process of the Houmendaie from mule horse traffic to Rickshaw from the perspective of social documentary, which marks the modernization process of Beijing during the period of the Republic of China. During this period, foreign photographers such as Yamamoto Zanchiro and Ogawa Ishin occupied a large proportion. Local photographers have also emerged. Beijing's urban architectural street scenes under the lens of Chinese photographers have begun to capture and discover the beauty of the city from the perspective of local photographers. From the works, we can see that domestic photographers are consciously looking for the daily life of Chinese people, such as hutong markets, temple fairs and other photos reflecting the people's livelihood at that time. The photos no longer represent the Oriental spectacle of foreigners, but a historical archives in a real sense. This stage in the rise of Chinese photographers at the same time, the dry version of photography is gradually applied in the image recording, do not need to take the dark room can complete the shooting work, photographers can put more time on the work of travel style, saving a lot of filming costs, in the way of image transmission, in addition to the scattered, more is directly to the whole group of works into the album published, such as the album *Beijing attractions*.



Fig.2 Beijing central axis image [6]

2.3 Propaganda narrative in the period of socialist construction

After the founding of the People's Republic of China, urban architectural images began to be used as propaganda for urban and national construction. For example, photographers of the Beijing Municipal Planning Bureau, Dehong Zheng, Zhaozong Chen and others, organized the shooting of Beijing's Ten Major Buildings (Great Hall of the People, Beijing Railway Station, National Culture Palace, Beijing Workers' Stadium, etc.) in the 1950-1960s [7]. These pictures are collectivist, well-organized and ambitious construction team, majestic architectural panorama, all of which reflect a visual narrative of the rise of new China (Fig.3). Its distinctive feature is that it has a strong political attribute-decolonization reconstruction, such as deliberately avoiding the old Beijing during the Republic of China, highlighting the picture of socialist transformation, and so on. The vision of the building is built, the architectural image focuses on a way of building-strengthening labor glory, and the photography is to establish a typical case picture. Photography in this period still mainly used film. Because of the scarcity of film, the production of images was basically monopolized by the government. Most of the photos taken are black and white, and there is no excessive color saturation, but the composition is extremely fastidious, and the pursuit of socialist realism aesthetics.



Fig.3 Great Hall of the People

2.4 Marketization and multiple expressions in the digital age

After entering the 1990s, urban architectural images ushered in a period of diversification. *The Back to the Origin* series of Beijing Architectural Design and Research Institute photographer Jinbiao Liu uses the perspective of the 1950s to recapture the photo comparisons formed at Tiananmen and Beijing Hotels [8]. Wu Zheng, a photographer in Tongzhou, keeps track of the development process of Tongzhou from rural to urban sub-center, and has accumulated hundreds of thousands of photos. Since the new century, *the Space-time Photography Museum project* of Beijing Institute of Surveying and Mapping has used satellite images and social media as a communication platform to show the changes of Tongzhou Sub-center ten years ago. With the support of integrated media and AI technology, the audience can display the card printing machine and photographic works of architectural photography from the platforms such as Xiaohongshu and B station at any time; AI technology is restoring the truth of historical images for people. The architectural image of Beijing is not only the technical history of photography and architecture, but also a side of the history of power, memory and social change. With the arrival of VR, meta-universe and other waves in the future, the future architectural images will not only be documentary, but also have a new scene of virtual reconstruction.

3. The characteristics and image expression of Beijing urban architecture

3.1 The shooting expression of ritual order architecture

The symmetrical aesthetics of the ancient buildings in Beijing, the color level of the glazed tile roof, the progressiveness of the courtyard space, and the carved details on the bricks and tiles are all good materials for photographers to take pictures. For ancient buildings, especially the royal buildings, photographers have created the shooting techniques of light and shadow poetics, symbol deconstruction, time and space superposition. It is not only a visual presentation of the physical space, but also an artistic presentation that transforms the value contained in the interior of Chinese civilization into an ornamental one. The specific technique is the dawn-dusk line shooting method of architectural image. The direct light at noon will set off the central axis to be particularly spectacular and sacred; in the early morning or evening, it is another scene; the side light of the twilight line will make the outline of the building as vivid and heavy as sculpture. For example, the photographer Junyi Shang's shooting method (Fig.4). Through the side-illumination of the early morning light, the noon gate and the inner golden water bridge have become the carriers of air aura, adding a touch of dramatic sublime to the completely solidified ancient buildings. The second is to use the window lattice's light and shadow paper-cut technique to use the ancient partition windows and leaky windows as natural filters. In practice, the space is compressed by using the telephoto lens, so that the geometric pattern of the window lattice and the long-distance scenery produce a superimposed effect, forming a kind of virtual and real oriental charm or borrowing scenery in the light and shadow to be segmented and reorganized to form a secondary composition. The third is the decontextualized splicing of architectural components. The Imperial Palace Kissing the Beast, Dougong, Xumizuo and so on carry the solemn grade. Only in the original environment can it show its solemn and solemn feeling. After the monomer is enlarged and the original environment is removed, only a kind of visual totem that is breathtaking is left. Such as Shaobai Li's *Invisible Palace* series of photos with high contrast black and white photography after processing pure empty only a kissing beast image, this form itself is the most cultural and artistic charm of a symbol. The fourth is the psychological narrative technique of architectural color (Fig.5). The red and yellow main color tone of the Imperial Palace has a distinct political significance, creating emotions through color. Yan Ming's *Big Country* expresses the snow scene of the Forbidden City in a blue-gray tone, revealing a sense of historical vicissitudes, and grafting the colors of different occasions and different time conditions into the building.



Fig.4 Junyi Shang's works



Fig.5 Shaobai Li's works

3.2 Multicultural architectural shooting expression

Beijing, which has a history of three thousand years and inherits the three eras, is a gathering place where different civilizations meet, collide and merge. It brings together various architectural styles and styles of ancient and modern China and the West. Whether it is shape or content, no matter what style of material is selected or what kind of spatial layout is selected, it contains a variety of different cultural codes and narrative discourses. Photography, as a visual medium, is not only a cultural carrier to record various buildings and buildings, but also participates in and even creates cultural significance in a sense. Architectural photography has long gone beyond the dual framework of documentary and aesthetics, and entered into a critical, narrative and conceptual multi-path. Beijing architectural photography should be a subjective fusion expression produced in the negotiation of cultural identity and cultural multi-sympathy. With the changes in the structure of immigrant cities and the strengthening of international exchanges, buildings of different cultures are mixed together. Image creation on the basis of this integration will also be mixed with traces of mixed culture. The photographer wants to turn himself into a cultural detective, through the walls, tile ridges, panes, light and shadow carefully looking for hidden in the various cultural encounter scene here. When photographing various representative buildings such as the Niujié worship temple in Beijing, the Russian Orthodox Church, and the French Embassy of French architecture, it is not just a simple mechanical image presentation, but must be through light and shadow selection, environmental selection, and angle selection. The cultural emotions that permeate various architectural styles are extracted from the photos. Such as the use of soft light to express the Catholic church in the eastern suburbs, the use of contrast color to deepen the tone of the Hutong in the bridge theater scene; highlight the cultural collision and build the visual tension field of the building. While photographing buildings of different eras, we use the time montage technique to make a sharp contrast between the iconic colors of the two buildings, creating a strong visual stimulation and creating a semiotic metaphor (Fig.6).



Fig.6 The ancient and modern same frame perspective of architecture

3.3 Shooting expression of Beijing experimental building

Influenced by globalization and capital drive, a large number of experimental buildings have appeared in Beijing. Its most intuitive features use a large number of cutting-edge materials, such as transparent concrete, hyperboloid glass curtain wall, light steel structure, inflatable membrane structure, etc. These cutting-edge building materials enhance the functionality of some buildings and enrich the performance of architectural vision. Experimental buildings often have structural innovations, such as the Bird's Nest, Water Cube, Wangjing SOHO Building and so on adopt the appearance of glass curtain wall and metal components interspersed with each other to present a curved reticulated shell structure. The emergence of experimental buildings or buildings in Beijing often becomes a landmark in urban space, and tends to be monumental. In addition to expressing the symbolic meanings of power/ capital/ modernity, the ultra-high-volume buildings that rise from the ground can create a vertical power narrative and become the subject of the times. It provides a broad place for photography, such as China's most representative series of CBD super high-rise buildings, in the form of looking up, reflecting the strong impact and grand scale and firm and powerful structural logic. In the picture, the street flow and some surrounding low-rise buildings are used as reference objects, which can better reflect the comparative relationship in proportion and the dominance as landmarks. In the process of globalization, Beijing experimental

architecture has become a visual node connecting local culture and international context. Architecture itself has become a very important subject of visual expression. Photography not only helps the audience understand the architecture itself, but also participates in the discussion of urban narrative and identity reconstruction at the visual level through the in-depth expression of material texture, scale relationship and style conflict (Fig.7).



Fig.7 Bird's Nest from the perspective of upshot

3.4 Reconstruction of urban appearance by architectural photography

In Beijing, there are many buildings or architectural complexes such as Gothic Catholic Church, Soviet-style office buildings, Japanese-style commercial buildings, and antique Chinese facades. It presents a hybrid world-localized hybrid context. In the face of visual mixing between different styles, photography is constructive in addition to documentary. Architecture is not only built for living or use, sometimes it is built for the performativity of international capital, tourists and media. The reason why photography can decipher the differences or characteristics between different cultural styles is not only because of its presentation, description or presentation of things, but also because it can find a suitable shooting angle in such performativity to reveal the visual effects of packaging, or to find out the phenomena that are performed. Such as Sanlitun Taiguli building, the contrast between its modern light style and the surrounding traditional houses reflects the tension between the global consumer culture and the local lifestyle. Through the juxtaposition of street activities, brand signs and architectural language, photography can reveal the construction of a urban appearance (Fig.8).



Fig.8 Sanlitun Street

4. The innovation of Beijing architectural photography in the era of media convergence

4.1 Image practice of public participation

With the popularity of smart phones and social media platforms such as Xiaohongshu, Tik Tok, and Weibo, architectural photography is not only the work of traditional professional photographers, but also an important visual activity in the daily life of the broad masses of the people.

Through the algorithm push mechanism, the social platform incorporates architectural photography

into the traffic logic to form the so-called punch culture or aesthetic template. In this mode, urban architecture is no longer just a recorded object, but also a kind of visual capital that can be consumed. Various photography activities have gradually break through the barriers between professional and amateur. Ordinary citizens upload daily architectural images, expanding the participation foundation and cultural influence of architectural photography, and making breakthroughs in shooting creativity. In the performance of modern architecture, such as Wangjing SOHO and China Zun, the public prefers to strengthen its curve shape and vertical tension, supplemented by long exposure of night scenes, highlighting its sense of technology and future. In addition, photography has also begun to tend to mix a variety of forms of expression, such as the integration of elements of time flow in photography (such as urban shutters, motion blur), the use of mirror reflection to show the interaction between architecture and the surrounding environment, the use of AI overlay technology to build a visual dialogue between architecture and history, etc., in a variety of ways using multiple exposure, digital collage, infrared photography, projection intervention and other methods to create a creative pull between architectural space and image language.

4.2 The atypical perspective of architectural photography

Thanks to the progress of science and technology, architectural photography is no longer the patent of a few people. It needs the elite threshold of large frame and axis shift. Architectural images are no longer limited to a single viewpoint controlled by a few people in the power center. Through the development of mobile phone shooting, online sharing, drone angle, artificial intelligence map generation technology, everyone can easily get the key to capture the building. As a photographer, the public began to rewrite their own cities with their own experience and vision, and reinterpreted the buildings with their own vision. The art of photography has undergone an important sociological turn, that is, from work completion to process sharing; from author-centered to multi-person co-creation. The subject-object relationship of traditional photography: the photographer is the subject and the subject is the object. In the era of fusion media, the boundary between the subject and object of architectural photography has been blurred, and even the phenomenon of putting the cart before the horse has appeared. The building is not just a passive photographed object, but the building itself, in turn, guides the photographer's composition and creativity with its own structural laws, material texture, and spatial tension (Fig.9). The public reconstructs with the help of various technical means and their own cultural connotation and social attributes. The production and dissemination of architectural images is no longer a single perspective of professional photographers and media organizations. Instead, tens of thousands of people use different shooting equipment, at different times and places, from different perspectives to continuously record and upload the Beijing urban landscape they see. This decentralized image production has brought unprecedented information fragmentation. Light and shadow moments, accidental events, and individual emotions are quickly captured, but often lack systematic and complete narratives. This kind of atypical perspective frees the performance function of architectural photography from the traditional function of striving for record, to perceive translation, to reconstruct image, and to highlight the author's own subjective consciousness; it confuses the boundary between reality and virtuality, the difference between documentary and imagination, and constructs a new representation after capturing a certain moment. It is an avant-garde discourse of urban visual culture (Fig.10).



Fig.9 CCTV Headquarters Building Special Perspective



Fig.10 Beijing architectural image from the perspective of couriers

4.3 AI image empowers building image

With the development of artificial intelligence (AI) image generation technology, architectural photography has ushered in a new stage of algorithm reconstruction. Software such as ChatGPT4o, Midjourney, Stable Diffusion can generate a variety of images with complex structures and a sense of environmental atmosphere. Shooting can no longer fully summarize the photography work. Images can not only shoot the real world, but also be created and virtually constructed by applying algorithms. AI not only simulates reality authenticity, but also relies on the physical existence of real buildings. It is refined on massive image data sets, builds, assembles and transforms some image styles according to keywords or image styles, and completes style transfer. For example, when we enter key words such as Cyber Beijing Hutong and Night View of China in the Valley in the Future, AI can build an imagined scene of realistic landmarks based on the existing database, breaking the logic of real urban space and shifting architectural photography from recording reality to choreographing reality. AI exploits the narrative possibility and future imagination of architectural vision. The new attempt and thinking of various ways make architectural photography no longer simply a silent gaze on architecture, but a mixed state of photography and urban culture, personal experience and future technology, and a kind of urban scene created by photography (Fig.11,12). AI architecture photos will also become some kind of visual system, a spatial complex of memory, imagination and technology.



Fig.11 Uses AI to generate a Chinese portrait of freehand style

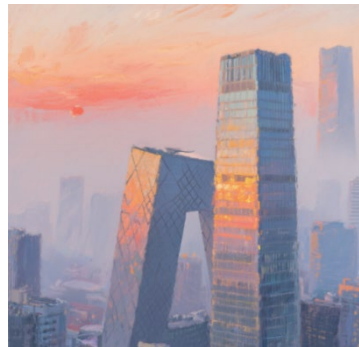


Fig.12 Uses AI to generate the Monet impression of CBD buildings.

5. Conclusion

Beijing has a large number of historical and cultural resources, itself has a strong cultural narrative power. From the Imperial Palace to Tiananmen to the current CBD and Chinese Zun, architecture is not only a space place, but also a national lifeline. In this way, Beijing shows national identity and provides a national lifeline like visual representation. Architectural photography is a complete record of urban morphological changes at this level, showing an internal cultural continuity and realistic spatial reproduction. The image expression of Beijing architecture has both visual and cultural choices: in the former, it is the recognition of the urban spirit, and in the latter, it is to show the social structure through a visual impact. Therefore, the architectural image of Beijing is not only a memory record of the skin of the city, but also an insinuation of the bone and soul of the city.

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References

- [1] *Beijing photographed during the Second Opium War in 1860.* (2024, November 29). NetEase. Retrieved from <https://www.163.com/dy/article/JI6S6Q4U0556AQJE.html>
- [2] *Eight-Nation Alliance conducted aerial reconnaissance with balloons in Beijing and took the earliest aerial photos of China.* (2022, September 18). Sina Finance. Retrieved from https://cj.sina.com.cn/articles/view/7402499933/1b9392f5d00101k0a1?finpagefr=p_104
- [3] *How did Yamamoto Sanshichirō, the earliest owner of a photo studio in Beijing, become a famous photographer?* (2020, March 22). Sohu. Retrieved from https://m.sohu.com/a/382057838_120073393/?pvid=000115_3w_a
- [4] *Photographs of Beijing (including 32 old photos).* (2018, November 8). Juejin. Retrieved from <https://juejin.cn/post/6844903709789388813>
- [5] *Felice Beato's images of China through his camera.* (2002, December 1). OBJ. Retrieved from <http://cn.obj.cc/article-13946-1.html>
- [6] Liu, Y. (2021). *Centennial images of Beijing's central axis.* Beijing Daily Press.
- [7] *The transformation of Beijing and photographers' era memories.* (2025, April 10). Baijiahao. Retrieved from <https://baijiahao.baidu.com/s?id=1828961672998685922&wfr=spider&for=pc>
- [8] Qian, F. (2016, July 13). *Two generations of photographers record urban changes from the same angle: Returning to the origin to witness Beijing's transformation.* Huanqiu. Retrieved May 14, 2025, from <https://m.huanqiu.com/article/9CaKrnJWt2T>